Table 1. Comparison of clinical and laboratory findigs of patients with and without fQRS

	fQRS present (n=91)	fQRS absent (n=157)	p value
Age	64,82±12,65	62,26±11,38	0,102
Sex M/F	69/22	120/37	0,914
Hypertension (%)	48 (52,7)	72 (45,9)	0,296
Diabetes Mellitus (%)	21 (23,1)	29 (18,5)	0,384
Hyperlipidemia (%)	27 (29,7)	32 (20,4)	0,098
Cigarette habit (%)	55 (60,4)	92 (58,6)	0,776
Family history (%)	29 (31,9)	40 (25,5)	0,279
Chest pain duration (min)	194,62±174,01	165,19±171,51	0,196
SBP (mmHg)	132,81±26,56	128,15±26,22	0,181
DBP (mmHg)	79,32±17,01	76,73±16,91	0,248
Door to needle time (min)	29,11±9,43	26,90±8,08	0,181
LVEF (%)	34,83±6,76	46,75±6,22	<0,001
HB (gr/dl)	13,23±1,93	13,47±2,04	0,355
WBC (x103/μL)	12.958±3.07	10.780±3.38	<0,001
PLT (x103/μL)	227,89±63,43	217,78±71,74	0,266
BUN (mg/dl)	19,24±13,72	17,48±6,18	0,248
Creatinine (mg/dl)	1,00±0,48	0,94±0,35	0,202
LDL-chol (mg/dl)	121,79±31,06	121,96±31,11	0,968
HDL-chol (mg/dl)	36,78±9,54	38,10±9,74	0,311
Maximum CK-MB (ng/ml)	228,27±121,23	114,77±85,55	<0,001
Maximum Troponin (ng/ml)	62,73±53,49	29,71±16,17	<0,001
QRS duration (msn)	107,86±8,95	102,77±9,21	<0,001
MI localization Anterior MI (%) Other (%)	35 (38,5) 56 (61,5)	71 (45,2) 86 (54,8)	0,300

(SBP: systolic blood pressure, DBP: diastolic blood pressure, LVEF: left ventricular ejection fraction, HB: hemoglobin, WBC: white blood cell count, MPV: mean platelet volume, PLT: platelet count, BUN: blood urea nitrogen, LDL-chol: low density lipoprotein-cholesterol, HDL-chol: high density lipoprotein-cholesterol, CK-MB: creatinine kinase-muscle band, MI: myocardial infarction)

POSTERS

PP-327

Abstract Withdrawn

PP-328

Feasibility of GRACE and TIMI Scores in Predicting the Extension of Coronary Artery Disease in Patients with Non ST Elevation Myocardial Infarction

Hale Unal Aksu[1], Şevket Gorgulu[2], Ender Oner[1], Mehmet Erturk[1], Omer Celik[1], Huseyin Aksu[1]

[1]Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, Cardiology Department, Istanbul, [2]Kocaeli Acibadem Hospital, Acibadem University, Cardiology Department, Kocaeli

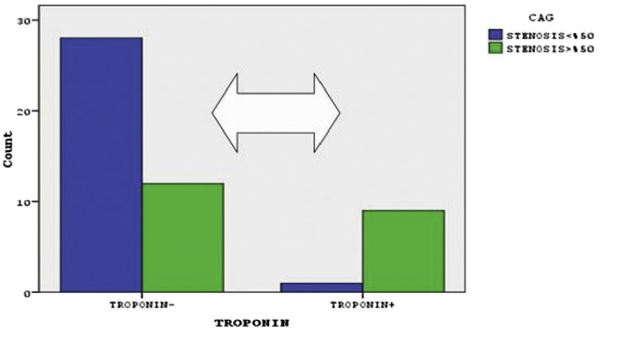
Aım: To assess the correlation of TIMI and GRACE risk scores with the SYNTAX score as the surrogate of severity and extent of coronary artery disease in patients with non-ST segment elevation myocardial infarction (NSTEMI).
Materıals-Methods: Patients admitted to our emergency department with chest pain, meeting the criteria of NSTEMI and undergoing coronary angiography during hospitalisation were considered for this study. Patients with ST segment elevation at admission, new left bundle branch block, percutaneous coronary intervention in the previous 6 months or previous coronary artery bypass graft surgery were excluded. TIMI and GRACE risk scores were calculated and coronary artery disease severity and extension were assessed by an experienced invasive cardiologist using the SYNTAX score algorithm.
Results: We assessed 145 patients (mean age 59.41±11.04 years, 29% female). A positive correlation of the SYNTAX score was observed with GRACE scores for in-hospital death, in-hospital death or MI, death at 6 month and death or MI at 6 month (r=0,414, p<0.0001; r=0,370, p<0.0001; r=0,417, p<0.0001; r=0,415, p<0.0001, respectively). The SYNTAX score also had a significant but weaker correlation with the TIMI score(r=0,271, p=0.001). The GRACE score showed good discriminatory capacity between the patients with and without a high-risk (>33) SYNTAX score, with an area under the ROC curve of 0.804 (CI 0.660–0.948, p=0.002); however, the TIMI score showed no predictive capacity and had an area under the ROC curve of 0.532 (CI 0.358–0.749, p=0.749).
Conclusıon: There is a positive association between GRACE, TIMI scores and SYNTAX score in patients with NSTEMI. GRACE scores but not TIMI score can predict the patients with high risk SYNTAX score (>33).

PP-329

Exercise ECG Test Should be Evaluated with Troponin T after Exercise in Women with an Intermediate Pretest Probability

Sinan İşcen
Diyarbakır Military Hospital, Diyarbakır

Background: A variety of tests are available to establish the diagnosis of coronary heart disease. Coronary angiography is the definitive diagnostic test for the presence of obstructive coronary artery disease. However, it is seldom used as the initial test because of its invasive nature.More practice exercise ECG testing is most useful in patients with an intermediate pretest probability (variably defined as between 25 and 75 percent or between 10 and 90 percent). But diagnosing coronary artery disease is more difficult with exercise ECG test in women with an intermediate pretest probability, because accurancy of exercise ECG is low. So we aimed to increase PPV (positive predictive value) of exercise ECG test together with used troponin T at fourth hour after exercise in women with an intermediate pretest probability.
Material-Methods: The study group for the evaluation of the diagnostic value of positive exercise ECG test and troponin T at fourth hour comprised 50 female patients with an intermediate pretest probability. The average age of the patients was 46.08±4.1. All the patients underwent ECG stress test, and all of them also coronary angiography as the next stage of the CAD definitive diagnosis process. During the test their clinical condition, ECG and arterial pressure were monitored. All the patients had positive exercise ECG test results. Additionally, the maximum pulse rate (MPR), number of the achieved metabolic equivalents (MET), stage and reason for termination, if any, were analysed. The degree of coronary stenosis was assessed visually and greater than 50% stenosis of the luminal diameter were considered haemodynamically significant (at any coronary). Troponin T was evaluated in all patient at fourth hour after exercise ECG test. Troponin>0.04 pg/ml was approved positive.
Results: The PPV of only exercise ECG test was 42% in women with an intermediate pretest probability. The PPV of exercise ECG test with troponin T(+) for positive coronary angiography (requirement revascularization at any coronary) was 90%, with troponin T(-) for positive coronary angiography was 30%. If compared, exercise ECG test with troponin T(+) was a better diagnostic predictor of CHD(coronary heart disease) was required revascularization (p<0.001).
Conclusıons: Exercise ECG test with troponin T(+) is superior to exercise ECG test with troponin T(-) in the prediction of necessary revascularisation procedures in women with an intermediate pretest probability and positive stress test results.



PP-330

Relation of Mean Platelet Volume with Subclinical Atherosclerosis in Patients with Metabolic Syndrome

Ali Rıza Gülcan[1], Mustafa Serkan Karakaş[2], Barış Akdemir[3], Mustafa Uçar[4], Refik Emre Altekin[4], Hüseyin Yılmaz[4]

[1]Sanlıurfa Education and Research Hospital, Department of Cardiology, Sanlıurfa, [2]Nigde State Hospital, Department of Cardiology, Nigde, [3]Burdur State Hospital, Department of Cardiology, Burdur, [4]Akdeniz University Medical Faculty, Department of Cardiology, Antalya

Objectıve: Metabolic syndrome (MetS) is associated with increased cardiovascular morbidity and mortality. There is evidence of platelet activation in MetS. Mean platelet volume (MPV), a determinant of platelet activation, is a newly emerging risk factor for atherothrombosis. Therefore, we have investigated the possible association between subclinical atherosclerosis,e valuated by carotid intima-media thickness (CIMT) measurement and MPV in MetS patients.
MATERIAL/METHODS:: 74 patients with MetS were enrolled to the study. Patients were divided into 2 groups according to CIMT measurement: 35 patients with CIMT ≥1,0 mm were at group 1 and 39 patients with CIMT <1,0 mm were at group 2. MPV were measured using an automated blood cell counter.

Results: Patients between ages 30 and 60 years with MetS diagnosis were included in this study. 31 patients (41.9%) were male and 43 patients (58.9%) were female. Patients were divided into 2 groups according to CIMT measurement: 35 patients with CIMT ≥1,0 mm were at group 1 and 39 patients with CIMT<1,0 mm were at group 2. There were difference only age and fasting blood glucose parameter among groups. In the multi-varians analysis, age and fasting blood glucose related in CIMT values were not statistically significant (p>0.05). Additionally, the common effect of age and fasting blood glucose variables on the CIMT values were not statistically significant (p=0.241). The MPV level was significantly higher in patients with CIMT ≥1,0 mm than in patients with CIMT <1,0 mm (8.2±0.7 vs. 7.8±0.6 fl; p=0.01) (Figure 1).
Conclusions: The risk of atherosclerosis could be shown with following the MPV values in MetS patients. Therefore, our results suggest that MPV is an important marker for early detecting the risk of atherosclerosis in patients with MetS. In our study, we showed that this risk could be determined with a simple blood count. Risk of atherosclerosis can be assessed by examining the values of MPV, without any additional blood tests or radiological examination.

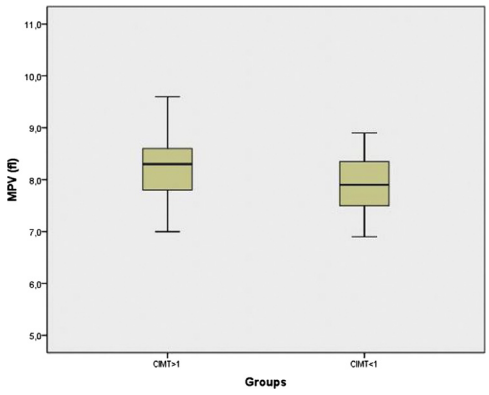


Table 1

	Group 1 CIMT ≥1,0 mm (mean ±sd)	Group 2 CIMT<1,0 mm (mean ±sd)	P
Number of patients (n)	35	39	
Age (years)	51.9±6.5	46.6±8.1	0.003
Gender (F/M, n)	23/12	19/20	0.16
BMI (kg/m^2)	31.3±4.0 30 (25-42)	32.2±5.0 31 (26-46)	0.62
Waist circumference (cm)	102.1±9.7	104.2±10.6	0.38
HT [n(%)]	14(40.0)	15(38.4)	0.94
DM [n(%)]	15(42.9)	10(25.6)	0.08
Smoking [n(%)]	6(17.1)	9(23.0)	0.33
SBP (mmhg)	128.1±11.8 130 (100-160)	124.6±12.5 120 (110-160)	0.09
DBP (mmhg)	81.8±7.1 80 (60-100)	79.4±7.1 80 (70-100)	0.06
Fasting glucose (mg/dl)	114.4±24.7 109 (76-206)	106.1±30.3 101 (81-260)	0.02
HbA1c (%)	6.3±0.9	6.1±0.99	0.37
HDL-cholesterol (mg/dl)	44.1±11.2	39.5±12.7	0.10
LDL-cholesterol (mg/dl)	116.5±36.1	120.7±39.2	0.63
Triglyceride (mg/dl)	178.1±80.8	217.6±108.9	0.08
Hemoglobin (g/dl)	13.3±1.2	13.6±1.4	0.23
Platelet (x109/l)	256.4±61.2	286.8±66.2	0.04
MPV (fl)	8.2±0.7	7.8±0.6	0.01

Baseline characteristcs of patients (BMI: body mass index, HT: hypertension, DM: diabetes mellitus, SBP: systolic blood pressure, DBP: diastolic blood pressure, LDL: low-density lipoprotein, HDL: high-density lipoprotein, MPV: mean platelet volume

PP-331

Endothelin Antagonists may be a Treatment Option for Cardiac Syndrome X, or Not ?

Şeyda Günay, İbrahim Baran, Ali Aydınlar, Osman Akın Serdar, Sümeyye Güllülü, Dilek Yeşilbursa, Bülent Özdemir, Aysel Aydın Kaderli, Tunay Şentürk, Saim Sağ
Uludag University Faculty of Medicine Department of Cardiology, Bursa

Atherosclerosis is a systemic disease which effects large and medium sized arteries besides coronary arteries. Atherosclerosis and associated diseases are the leading cause of death all over the world. It is known that endothelial dysfunction already starts before atherosclerotic involvement of coronary arteries. To diagnose atherosclerosis before organ damage has occured is important. The aim of the study is to evaluate the relationship between endothelial dysfunction and serum endothelin-1 levels, small artery elasticity, coronary artery disease severity and also to seek an answer if endothelin-1 antagonists may be benefical for cardiac Syndrome X or not.

Patients with chest pain were evaluated with exercise stress test or myocardial perfusion scintigraphy. Then ischemia deteceted patients underwent elective coronary angiography. Using ELISA method serum endothelin-1 levels of all patients were measured and a radial artery tonometer was used to measure arterial elasticity of all patients. The patients were grouped according to coronary artery disease history, ischemia existence and coronary angiogram results. The groups were compared with regards to serum endothelin-1 level, small artery elasticity and Gensini scores.

In the study group, 50 patients (62,5%) were male and 30 (37,5%) were female and the average age was 58,4 ±10,7 years. Twenty six (32,5%) of the patients had coronary artery disease history. Ischemia was present in 55 (68%) patients. Critical coronary lesions were present in 21 (38%) patients who underwent coronary angiography. Median serum endothelin-1 level was 18,9 ng/L (8,5-134,9 ng/L) in patients with ischemia and 14,8 ng/L (8,4-41,5 ng/L) in patients without ischemia. Serum endothelin-1 level of ischemic patients was higher (p=0.045). There wasn't a statistically significant relationship between serum endothelin- 1 levels and coronary artey disease history, small artery elasticity, Gensini scores.

Because of serum endothelin-1 level of patients without coronary artery disease history but with ischemia and normal coronary angiograms was higher than non-ischemic patients, it is assumed that endothelin-1 antagonists may be benefical for cardiac Syndrome X. To support this, there is a need for large prospective population based studies.

PP-332

The Relationship between Serum 25-hydroxyvitamin D levels and In-Stent Restenosis in Patients with Stable Coronary Artery Disease

Alparslan Kurtul[1], Mustafa Duran[1], Mikail Yarlıoğlueş[1], Muhammed Karadeniz[1], Gökhan Ergün[1], Ertan Vuruşkan[2], Emre Akkaya[2], Sani Namık Murat[1]
[1]Ankara Education and Research Hospital, Ankara, [2]Gaziantep Government Hospital, Gaziantep

Background: It has been shown that low levels of 25-hydroxyvitamin D are associated with increased cardiovascular risk factors and events. The relationship between serum 25-hydroxyvitamin D level and in-stent stenosis was investigated in our study.
Methods: A total of 181 patients with stable coronary artery disease and previously implanted (>3 months) bare-metal stent were included in the study. Two groups were formed according to angiographic results as Group 1 (≥50% in-stent stenosis) and Group 2 (<50% in-stent stenosis). Serum 25-hydroxyvitamin D measurements were performed by reverse-phase HPLC.
Results: The mean serum 25-hydroxyvitamin D level was found to be significantly lower in Group 1 compared to Group 2 (17.7±5.3 ng/ml and 20.9±6.7 ng/ml, p<0.01, respectively) and length of stent was longer in Group 1 compared to Group 2 (18.7±5.3 mm and 17.1±11.2 mm, p<0.01, respectively). In multivariate logistic regression analysis, only low level of serum 25-hydroxyvitamin D was an independent risk factor for in-stent stenosis (p<0.01, OR=0.915, 95% CI 0.866-0.967).
Conclusion: Our results suggest that lower levels of 25-hydroxyvitamin D are associated with an increased risk of in-stent stenosis.

PP-333

High Prevalence of Glucose Intolerance and Diabetes in Patients with Coronary Artery Disease

Sinan Varol, Vedat Sansoy, Okay Abacı, Muhsin Kalyoncuoglu
Institute of Cardiology, Istanbul University, Istanbul

Purpose: Our purpose was to investigate the relationship between the prevalence of glucose intolerance and type 2 diabetes with cardiometabolic risk factors in patients with asymptomatic coronary artery disease.
Methods: 132 patients who had not been previously diagnosed with glucose intolerance or diabetes, and had coronary artery disease (CAD) were enrolled. 2 hour standard oral glucose tolerance test (OGTT) with 75 gr. glucose was conducted. Patients were divided into two groups as normal and with impaired glucose tolerance (IGT) or diabetes (DM). Groups were compared according to waist circumference, body-muscle index, creatinin clearance, risk factors of CAD, severity of CAD, functional capacity, angina score. In patients with Fasting plasma glucose (FPG) <100 mg/dl, HOMA-IR values were investigated. For statistical analysis, t-test, Mann-Whitney U, Kruskal Wallis or logistic regression test were used.
Result: Prevelance of IGT(%26) or DM (%4) was %30 in patients with CAD. %27 of patients had a value of FPG <100 mg/dl before the test was conducted. Between the